

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : **08-092114**

(43)Date of publication of  
application : **09.04.1996**

(51)Int.Cl.

**A61K 35/78**  
**A01H 4/00**  
**C07H 15/256**  
**C07J 9/00**  
**C07J 63/00**  
**C12N 5/04**  
**C12P 19/56**  
**C12P 33/00**  
**// (C12P 19/56**  
**C12R 1:91 )**  
**(C12P 33/00**  
**C12R 1:91 )**

(21)Application  
number : **06-251509**

(71)  
Applicant : **NEOS CO LTD**

(22)Date of filing : **19.09.1994**

(72)Inventor : **OKAWA NAOSHI**  
**GOTOU TOMOHIRO**  
**AEBA KEIZO**

**(54) METHOD FOR PRODUCING SAPONIN COMPOUNDS OBTAINED FROM  
UNDIFFERENTIATED CULTURE CELL OF MEDICINAL GINSENG**

## (57)Abstract:

**PURPOSE:** To obtain the short chain saponin expected to have a new pharmacological effect different from those of conventional saponins by a specific tissue-culture method from a medicinal ginseng plant body.

**CONSTITUTION:** A callus induced from a medicinal ginseng plant body is held in a dedifferentiation state for a constant period or longer, cultured in a

dedifferentiation state, and subjected to the removal of dedifferentiated cell lumps to obtain the saponin

exhibiting a high multiplication property, establishing the homogenous culture cell systems of dedifferentiated cell lumps, and producing the dedifferentiated culture

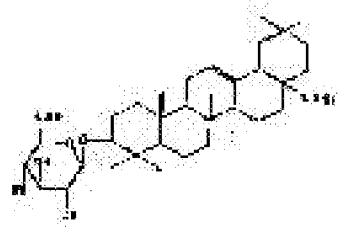
cells. Namely, the tissue of the medicinal ginseng plant body is subcultured in a culture medium for inducing the

callus, and the obtained calluses are again subcultured in a culture medium for inducing the dedifferentiation. The

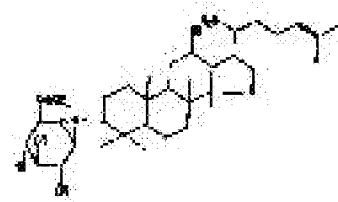
dedifferentiated cell lumps are removed, and the obtained undifferentiated cell lumps are cultured and

subsequently subjected to the extraction of ingredients to obtain the saponins. The medicinal ginseng plant body is

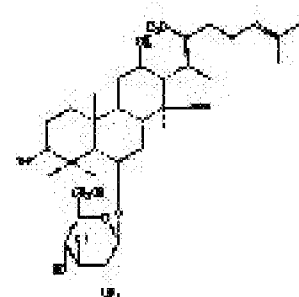
suitably *Panax japonicus*. Saponins of formulas I (R<sub>1</sub> is H, 1-hexose), II (R<sub>2</sub> is the same as R<sub>1</sub>), and III are obtained. The saponins can stably be supplied by the method.



I



II



III